

## 0209750881 WILSON CREEK AT MOUTH NEAR CHAPEL HILL, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD--August 2002 to November 2003 (discontinued).

PERIOD OF DAILY RECORD--

WATER TEMPERATURE: August 2002 to November 2003.

INSTRUMENTATION--Logging pressure transducer with water temperature probe.

REMARKS.--Station operated as part of NAWQA Urban Land Use Gradient study.

EXTREMES FOR PERIOD OF DAILY RECORD--

WATER TEMPERATURE: Maximum recorded, 28.0°C, Aug. 24, 2002; minimum recorded, 0.2°C, Jan. 24, 2003.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Medium code	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfldr field, std units (00400)	Specific conductance, wat unf 25 degC (00095)	Temperature, water, deg C (00010)	Chloride, water, unfldr, mg/L (00940)	Sulfate, water, unfldr, mg/L (00945)	Ammonia + org-N, water, unfldr mg/L as N (00625)	Ammonia water, unfldr, mg/L as N (00608)
FEB 20...	0930	9	6.0	757	11.8	96	6.8	108	6.4	10.8	10.2	<0.10	<0.04
MAY 15...	1230	D	E1.8	--	8.4	--	7.3	110	17.5	--	--	--	--
JUN 18...	1200	9	--	--	--	--	7.4	103	19.9	--	--	--	--
JUL 08...	1030	9	--	--	--	--	--	--	--	--	--	--	--
JUL 15...	0945	9	E2.5	767	8.1	91	7.3	115	21.5	7.12	6.1	0.18	<0.04
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Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Particulate nitrogen, susp, water, mg/L (49570)	Phosphorus, water, unfldr mg/L (00665)	Total nitrogen, water, unfldr mg/L (00600)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inorganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, unfldr mg/L (00681)	Biomass periphyton, ashfree drymass g/m <sup>2</sup> (49954)	Periphyton biomass ash weight, g/m <sup>2</sup> (00572)	Periphyton biomass dry weight, g/m <sup>2</sup> (00573)
FEB 20...	0.22	<0.008	<0.02	0.03	E.002	--	0.2	<0.1	0.2	2.8	--	--	--
MAY 15...	--	--	--	--	--	--	--	--	--	--	1.600	18	19.30
JUN 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 15...	0.23	<0.008	E.01	0.03	0.029	0.41	0.2	<0.1	0.2	3.3	--	--	--
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Date	Biomass chlorophyll ratio, periphyton, number (70950)	Pheophytin a, periphyton, modif. m-TEC, water, col/ 100 mL (90902)	E. coli, chromo-fluoro, mg/m <sup>2</sup> (70957)	Chlorophyll a periphyton, water, unfldr, ug/L (49295)	1-Naphthol, water, unfldr, ug/L (49295)	2,6-Diethyl-aniline water, unfldr, ug/L (82660)	2-[2-Et-6-Me-Ph)-amino] propan-1-ol, ug/L (61615)	2-Chloro-2,6'-diethyl acetanilide wat flt ug/L (61618)	CIAT, water, unfldr, ug/L (04040)	2-Ethyl-6-methyl-aniline water, unfldr, ug/L (61620)	3,4-Di-methyl-aniline water, unfldr, ug/L (61625)	4-Chloro-2methyl phenol, water, unfldr, ug/L (61633)	Acetochlor, water, unfldr, ug/L (49260)
FEB 20...	--	--	47	--	<0.09	<0.006	<0.1	<0.005	<0.006	<0.004	<0.004	<0.006	<0.006
MAY 15...	1,170	<1.0	--	1.4	--	--	--	--	--	--	--	--	--
JUN 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	--	--	230	--	--	<0.09	<0.006	<0.1	<0.005	<0.006	<0.004	<0.004	<0.006
JUL 15...	--	--	--	--	--	--	--	--	<0.005	<0.004	<0.004	<0.006	<0.006

## CAPE FEAR RIVER BASIN

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## WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Alachlor, water, fltrd, ug/L (46342)	Atrazine, water, fltrd, ug/L (39632)	Azin-phos-methyl oxon, water, fltrd, ug/L (61635)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benzofuran, water, fltrd 0.7u GF ug/L (82673)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Chlorpyrifos oxon, water, fltrd 0.7u GF ug/L (61636)	Chlorpyrifos oxon, water, fltrd 0.7u GF ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyfluthrin, water, fltrd 0.7u GF ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipronil, water, fltrd, ug/L (62170)	
FEB 20...	<0.004	E.006	<0.02	<0.050	<0.010	<0.041	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	E.001	
MAY 15...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUN 18...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUL 15...	<0.004	E.004	<0.02	<0.050	<0.010	E.005	<0.06	<0.005	<0.006	<0.008	<0.009	<0.003	E.003	
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Date	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon oxon, water, fltrd, ug/L (39572)	Dicropophos, water, fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Ethion monoxon	Ethion water, fltrd, ug/L (61644)	Fenamiphos sulfone water, fltrd, ug/L (82346)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfide, water, fltrd, ug/L (61646)	Fenamiphos water, fltrd, ug/L (61591)	Desulf-inyl fipronil amide, water, fltrd, ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)
FEB 20...	<0.04	<0.005	<0.08	<0.005	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	<0.005	<0.005	
MAY 15...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUN 18...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUL 15...	<0.01	E.004	<0.08	<0.005	<0.006	<0.03	<0.004	<0.008	<0.03	<0.03	<0.009	E.004	0.006	
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Date	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Malaoxon, water, fltrd, ug/L (61652)	Malathion, water, fltrd, ug/L (39532)	Metaxyl, water, fltrd, ug/L (61596)	Methi-althion water, fltrd, ug/L (61598)	Methyl para-oxon, water, fltrd 0.7u GF ug/L (82667)	Methyl para-thion, water, fltrd, ug/L (61664)	Metolachlor, water, fltrd, ug/L (39415)	
FEB 20...	E.004	<0.002	<0.003	--	<1	<0.003	<0.008	<0.027	<0.005	<0.006	<0.03	<0.006	<0.013	
MAY 15...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUN 18...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUL 15...	E.008	<0.002	<0.003	<0.013	<1	<0.003	<0.008	<0.027	<0.005	<0.006	<0.03	<0.006	<0.013	
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Date	Metribuzin, water, fltrd, ug/L (82630)	Myclobutanil water, fltrd, ug/L (61599)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd 0.7u GF ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd 0.7u GF ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Pronamide, water, fltrd 0.7u GF ug/L (82676)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water, fltrd 0.7u GF ug/L (82670)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	
FEB 20...	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	
MAY 15...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUN 18...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUL 08...	--	--	--	--	--	--	--	--	--	--	--	--	--	
JUL 15...	<0.006	<0.008	<0.022	<0.10	<0.011	<0.06	<0.008	<0.01	<0.005	<0.004	<0.005	<0.02	<0.07	

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## WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Ter-butyl-azine, water, fltrd, ug/L (04022)	Tri-flur-alin, water, fltrd, 0.7u GF ug/L (82661)	Di-chlor-vos, water, fltrd, ug/L (38775)	Suspnd. sediment, percent <.063mm (70331)	Sus-pended sediment concentra-tion mg/L (80154)	Sus-pended sediment load, tons/d (80155)
FEB 20...	<0.02	<0.01	<0.009	<0.01	88	6	0.10
MAY 15...	--	--	--	--	--	--	--
JUN 18...	--	--	--	--	--	--	--
JUL 08...	--	--	--	--	--	--	--
15...	<0.02	<0.01	<0.009	<0.01	82	4	--

Remark codes used in this table:

- < -- Less than  
E -- Estimated value

Medium codes used in this table:

- 9 -- Surface water  
D -- Plant tissue

TEMPERATURE, WATER, DEGREES CELSIUS  
AUGUST TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	JUNE			JULY			AUGUST			SEPTEMBER		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	---	---	---	26.5	22.7	24.6	20.4	19.5	19.8			
2	---	---	---	---	---	---	26.0	22.3	24.0	20.4	19.1	19.6			
3	---	---	---	---	---	---	25.8	21.3	23.5	22.4	18.2	20.1			
4	---	---	---	---	---	---	25.7	21.0	23.4	23.7	19.4	21.4			
5	---	---	---	---	---	---	25.9	21.1	23.5	22.7	20.0	21.3			
6	---	---	---	---	---	---	24.9	21.5	23.1	21.9	17.6	19.8			
7	---	---	---	---	---	---	22.6	18.4	20.8	21.1	17.9	19.5			
8	---	---	---	---	---	---	22.4	17.0	19.9	21.5	17.1	19.2			
9	---	---	---	---	---	---	23.5	16.4	20.4	21.3	18.0	19.7			
10	---	---	---	---	---	---	23.5	18.6	21.1	22.5	19.4	20.7			
11	---	---	---	---	---	---	23.6	18.2	21.1	22.3	18.4	20.3			
12	---	---	---	---	---	---	25.1	19.3	22.4	19.9	16.6	18.4			
13	---	---	---	---	---	---	26.0	20.5	23.2	19.9	15.4	17.9			
14	---	---	---	---	---	---	25.3	20.4	22.7	21.8	18.4	20.1			
15	---	---	---	---	---	---	25.3	22.2	23.3	22.0	20.4	21.1			
16	---	---	---	---	---	---	24.5	21.8	23.1	22.0	20.7	21.3			
17	---	---	---	---	---	---	25.6	21.7	23.7	22.4	20.2	21.2			
18	---	---	---	---	---	---	26.5	22.1	24.3	21.7	20.5	21.1			
19	---	---	---	---	---	---	25.8	21.8	23.7	22.3	20.4	21.2			
20	---	---	---	---	---	---	25.5	21.6	23.8	22.4	19.5	20.8			
21	---	---	---	---	---	---	25.9	21.7	23.7	22.0	18.9	20.5			
22	---	---	---	---	---	---	26.1	22.7	24.5	22.5	19.3	20.8			
23	---	---	---	---	---	---	27.1	22.4	24.7	21.1	19.3	20.2			
24	---	---	---	---	---	---	28.0	22.8	24.8	20.3	17.6	18.9			
25	---	---	---	---	---	---	26.0	21.6	23.8	22.4	19.7	18.7			
26	---	---	---	---	---	---	22.6	21.3	22.1	20.4	18.1	19.0			
27	---	---	---	---	---	---	21.4	20.4	20.9	23.1	19.9	21.4			
28	---	---	---	---	---	---	20.6	19.6	20.0	22.3	20.7	21.4			
29	---	---	---	---	---	---	20.3	19.2	19.7	21.0	19.1	20.1			
30	---	---	---	---	---	---	20.4	19.1	19.6	20.4	17.5	19.1			
31	---	---	---	---	---	---	20.3	19.5	19.8	---	---	---			
MONTH	---	---	---	---	---	---	28.0	16.4	22.6	23.7	15.4	20.2			

## CAPE FEAR RIVER BASIN

0209750881 WILSON CREEK AT MOUTH NEAR CHAPEL HILL, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.6	18.9	20.1	12.2	10.2	11.3	8.0	5.2	6.5	12.8	10.3	11.6
2	22.0	19.2	20.6	11.4	9.3	10.5	7.5	3.8	5.8	10.9	9.3	10.1
3	22.4	20.0	21.3	11.8	9.8	10.7	8.2	5.4	6.6	10.6	8.8	10.2
4	22.9	20.2	21.6	13.0	11.0	11.9	5.5	1.6	3.8	8.8	6.4	7.6
5	23.4	21.1	22.2	12.5	12.1	12.3	5.4	1.9	3.8	8.0	5.2	6.5
6	22.2	19.4	20.5	13.5	11.6	12.6	6.6	5.2	5.8	8.0	6.1	6.9
7	21.2	18.9	20.0	11.9	10.3	11.1	6.5	4.2	5.3	6.3	4.1	5.3
8	20.0	17.1	18.0	12.0	9.0	10.6	7.1	4.7	5.9	8.2	5.3	6.6
9	18.1	16.4	17.2	13.5	10.0	11.8	7.0	6.1	6.5	10.3	7.0	8.4
10	19.4	16.4	17.5	15.6	12.5	14.1	6.8	5.9	6.4	9.9	6.8	8.6
11	19.9	19.2	19.6	17.0	15.2	16.1	7.3	6.0	6.8	7.2	4.8	6.0
12	20.6	19.3	19.9	16.5	14.3	15.7	9.0	7.1	7.9	5.6	3.4	4.5
13	19.9	19.0	19.5	14.3	11.9	13.6	8.0	6.8	7.6	6.1	2.9	4.4
14	19.4	16.5	17.7	12.9	10.4	11.7	9.1	7.9	8.5	6.8	3.4	5.0
15	16.5	15.4	15.6	13.2	10.4	11.8	8.5	7.1	7.8	6.1	3.3	4.8
16	16.9	15.8	16.3	13.8	12.8	13.3	9.8	6.9	8.1	5.3	2.8	3.9
17	16.4	14.6	15.6	13.4	11.6	12.8	8.3	6.5	7.4	5.6	3.0	4.1
18	15.2	13.0	14.3	11.7	9.9	10.8	8.8	6.7	7.7	3.9	1.0	2.4
19	15.6	12.7	14.2	11.5	8.6	10.1	9.6	8.1	8.7	4.0	0.6	2.1
20	16.8	14.4	15.6	11.9	9.0	10.4	12.6	9.6	11.2	6.8	2.2	4.1
21	16.5	14.7	15.8	12.2	10.2	11.1	9.6	7.5	8.5	4.9	3.6	4.3
22	15.0	14.0	14.5	11.7	9.3	10.7	9.9	6.5	8.1	5.6	2.2	3.8
23	15.5	12.9	14.2	10.0	7.7	8.9	9.2	6.7	7.9	4.0	0.3	2.3
24	14.9	14.1	14.5	10.8	7.3	9.0	8.5	7.8	8.1	2.2	0.2	0.9
25	14.6	13.9	14.2	11.5	7.9	9.6	8.9	6.9	8.0	4.4	0.4	2.0
MONTH	23.4	11.7	16.9	17.0	4.1	11.1	12.6	1.6	7.1	12.8	0.2	5.2
	FEBRUARY			MARCH			APRIL			MAY		
1	7.9	5.6	6.5	8.2	6.6	7.3	14.5	8.1	11.0	19.6	16.4	17.9
2	8.3	4.9	6.3	10.9	7.6	8.8	17.2	10.5	13.5	20.4	16.0	18.1
3	9.7	5.1	7.4	10.4	6.5	8.3	18.4	11.7	14.7	18.6	16.8	17.6
4	12.1	8.2	10.0	10.4	5.9	8.1	17.6	12.7	15.1	16.8	14.7	15.6
5	9.0	6.0	7.5	12.8	9.2	10.7	16.9	13.7	15.1	14.7	13.4	13.7
6	7.0	5.0	5.8	12.2	10.7	11.3	16.7	12.1	14.4	16.6	13.8	15.2
7	7.7	5.0	6.2	10.7	6.9	8.6	14.1	10.6	11.5	19.0	15.5	17.0
8	7.4	4.8	5.9	11.7	5.7	8.5	10.7	9.9	10.5	20.7	16.8	18.7
9	7.6	4.6	5.8	14.1	8.5	10.9	10.5	9.6	10.0	21.5	17.6	19.4
10	7.2	5.8	6.3	12.2	7.9	9.8	10.0	9.0	9.4	21.9	18.5	20.2
11	8.2	4.3	6.2	10.5	6.6	8.3	10.7	9.6	10.0	20.8	19.0	19.8
12	8.8	5.1	6.6	13.4	6.3	9.6	14.7	9.5	11.7	20.2	16.9	18.4
13	7.7	3.5	5.6	14.8	8.9	11.7	15.4	10.2	12.6	18.9	14.9	16.8
14	7.0	4.8	6.0	13.5	9.9	11.8	16.6	10.8	13.3	18.8	13.7	16.2
15	8.2	6.8	7.5	10.1	8.6	9.4	17.7	11.9	14.6	17.4	15.7	16.6
16	6.8	1.4	4.4	11.2	9.5	10.3	18.5	12.9	15.4	18.7	15.9	17.2
17	3.9	0.9	2.7	13.2	10.9	11.8	18.3	13.3	15.5	17.9	15.6	16.6
18	6.4	3.9	5.1	13.9	11.7	12.6	14.7	12.1	12.7	15.6	14.3	14.9
19	8.2	4.3	6.1	12.5	10.6	11.6	12.9	11.6	12.2	15.3	13.9	14.4
20	9.3	6.4	7.7	10.6	9.2	9.8	15.0	11.7	13.2	17.6	13.4	15.6
21	8.1	6.5	7.5	13.0	9.9	11.0	15.5	12.5	13.9	16.8	15.3	16.2
22	10.1	7.9	8.6	13.9	9.8	11.7	17.0	13.9	15.1	17.0	15.8	16.3
23	10.8	7.7	9.5	14.8	9.4	11.9	16.2	11.4	13.7	16.1	15.7	15.9
24	11.0	6.4	8.5	15.9	10.2	12.7	15.4	10.5	13.0	17.6	15.5	16.4
25	10.5	7.6	9.0	16.5	9.6	12.8	14.2	13.0	13.6	17.4	16.1	17.0
26	8.7	6.4	7.3	17.5	11.3	14.1	16.1	13.7	14.7	18.4	16.6	17.4
27	6.4	5.2	5.7	16.6	12.2	14.0	17.0	13.2	14.9	17.7	16.2	17.0
28	---	---	---	17.4	11.6	14.3	18.1	12.9	15.4	18.2	14.6	16.4
29	---	---	---	18.4	14.7	16.1	18.9	14.5	16.6	17.8	15.7	16.6
30	---	---	---	16.1	9.9	12.3	19.5	15.4	17.4	18.9	15.0	16.9
31	---	---	---	12.7	8.5	10.2	---	---	---	19.6	16.1	17.2
MONTH	---	---	---	18.4	5.7	11.0	19.5	8.1	13.5	21.9	13.4	16.9

## CAPE FEAR RIVER BASIN

0209750881 WILSON CREEK AT MOUTH NEAR CHAPEL HILL, NC—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003**